XXXVII. On the British Species of the Genus Gelechia of Zeller.* By J. W. Douglas, Esq. (Continued from page 179.)

[Read May 7th, 1849.]

Sp. 21. Rufescens.
Re. rufescens, Haw.
*G. Isabella, F. v. R.
Acomp. tinetella, St., Wood, 1244 (non H.)
Mr. Allis has Haworth's specimens.

Sp. 22. *Velocella.

G. velocella, Tis., F. v. R. pl. 77, fig. 4, Z.

Lita velocella, D.

L. subsequella, Tr. (non H.)

An. nebulea, St.? Wood, 1191 (non Haw.)

(non Ti. populella, H. 21.)

This is certainly the nebulca of Stephens's Cabinet, but the description in his "Illustrations" does not agree with it. Moreover, he says, "found in June in gardens within the metropolitan district," whereas it is never known to be taken but in dry, sandy places far from gardens, such as Jerry's Hill, Putney Heath, the heath field at West Wickham, &c. in April, never in June; I am, therefore, doubtful if this be the species intended by Mr. Stephens. Again, he gives as a synonym "Ti. populella, H.," which is a widely different insect, not agreeing with his description at all, and not found in Britain hitherto as far as I am aware; so the name "nebulea, St.," adopted on the continent for Hübner's moth, because "populella" was already used by Linné, cannot remain for it, and Treitschke's name "pinguinella" must be resumed. Zeller says that velocella appears twice a year, in April and July; I never saw the second brood.

^{*} Those species marked * are in the collection received from Herr Mann of Vienna.

Sp. 23. Nigra.

Re. nigra, Haw.

An. hortuella, Wood, 1189, St.?

An. rusticella, St. (non H. 17.)

An. cautella, D.

*G. cautella, Z.

Found on the trunks of white poplars, at Wanstead and elsewhere, in July. It is very active and difficult to capture.

Sp. 24. * Gibbosella.
G. gibbosella, Z.
An. punctella, Bent. (MS.)
An. Zephyrella, St.? (non H.)

Wood's figure 1193 does not represent this insect, it appears to be a copy of Hübner's figure of Zephyrella.

Taken in Epping Forest by Mr. Bouchard.

Sp. 25. Contigua.

Re. contigua, Haw.

An. tricolorella, St. (non Haw.) Wood, 1215.

Haworth's description is not sufficient to distinguish this species with precision, but his own specimen is in the Collection of the Entomological Society, with the name attached in his own writing, so that I have no doubt this is the species intended by him. The tricolorella of Haworth is probably the Anacampsis decorella of Stephens, which is an Elachista.

Not rare about Camberwell from May to September in whitethorn hedges, in which many other plants grow. I know nothing of its early states.

Sp. 26. Diffinis.

Re. diffinis, Haw. St.?

Re. nebulca, Haw.

An. Listerella, Wood, 1190 (bad), (non Haw.)

Lita dissimilella, D. pl. 297, fig. 4.

* G. scabidella, Z.

This moth is also very imperfectly described by Haworth, but the Entomological Society has Haworth's specimen labelled by himself. I have often taken this species in sandy places at Putney Heath, Blackheath, and Dartford Heath, in May, and last year at West Wickham Wood in September.

The nebulca of Haworth, with his own label attached, is in Mr. Allis's collection, and is diffinis, with the markings worn down.

Sp. 27. Maculella.

Ti. maculella, F. vol. 3, pt. 2, p. 306, No. 82.

Re. maeulea, Haw.

An. maculella, St. An. nivella, Wood, 1224.

* G. blandella, F. v. R. (Mann.)

Sp. 28. Rhombella.

G. rhombella, Z. (non An. rhombella, St., Wood.) Ti. rhombella, W. V.? H. 277 (not good).

Lita rhombella, Tr.? Dup. pl. 297, fig. 7 (good).

Re. rhombea, Haw.

Expansion of wings 7 lines.

Head ashy grey. Palpi grey, the end of terminal joint black. Antennæ annulated, black and white alternately. Thorax ashy grey. Anterior wings ashy grey, caused by dark atoms on a white ground; a longish black spot at the base on the costa; two black spots on the disc, one before, the other behind, the middle; two small opposite black spots beyond, one of them on the superior the other on the inferior margin, and then a faint fascia. wings leaden grey. Body ashy.

Mr. J. F. Stephens has two specimens without a name. examples I received from Mr. S. Stevens, who took them on apple trees. Neither Hübner's figure nor Treitschke's description well agree with our insect, inasmuch as three spots are represented and described as in the centre of the wing, whereas in our moth there are but two so situated, and the shape of the spots is not the same; but both Hübner and Treitschke are quoted by Duponchel, and his figure well represents our insect. Mr. Allis has Haworth's specimen.

Sp. 29. * Proximella.

G. proximella, Z.

Ti. proximella, H. 228 (not good).

Lita proximella, Tr., Dup. pl. 297, fig. 10.

Re. punctifera, Haw.

An. rhombella, St., Wood, 1194.

Mr. Allis has Haworth's specimens, both of his α and β varieties of punctifera.

Not rare in birch and alder trees in May and June. Treitschke says the larva is whitish green, with three longitudinal streaks, of which the dorsal one is red, and two lateral ones reddish grey. He also says it feeds on birches.

Sp. 30. *Sequax.

Re. sequax, Haw.

*G. apicistrigella, F. v. R. (Mann.)

Lita apicistrigella, D. Supp. pl. 74, fig. 4 (very bad).

An. contigua, Wood, 1212.

Haworth's specimen, with his ticket attached, is in the Collection of the Entomological Society.

Taken on the downs beyond Croydon in July.

Sp. 31. * Tæniolella.
G. tæniolella, Z.
Lita tæniolella, Tr. (MSS.)
Harp. cinctella, St.? L.? Wood, 1390.

Anterior wings black, with a white straight fascia in the centre, which shines through on the underside, and is continued on the margin of the posterior wings, which are entirely black on the upper side.

There are two other species closely allied to this one, and there is nothing in the descriptions of either Linné or Stephens to show which one is intended by the name "cinctella."

Taken on the downs near Croydon and Mickleham in June.

Sp. 32. Domestica. Re. domestica, Haw. An. domestica, St., Wood, 1203. G. Basaltinella, Z.

I thought from Herr Zeller's description of his G. Basaltinella that it referred to this species; but as he found his specimens on Basalt pebbles, covered with moss, at Spitzberg, and we find ours in houses and gardens near London, I doubted if it were really identical. Lately, however, Herr Zeller having sent me specimens, I am sure it is the same species.

Sp. 33. *Lentiginosella.
G. lentiginosella, Z.
Lita lentiginosella, Tis., F. v. R. pl. 80, fig. 3.

Expansion of wings, 8½ lines.

Head, palpi and antennæ tawny brown. Anterior wings shining, rich reddish brown; on the disc before the middle are two spots,

one above the other, and close together; beyond the middle, in a line with the upper of them, is a single spot, all of these are yellow, each having a black dot in its centre: these spots are not well seen without a lens. On the costa near the apex is a small yellow spot, and another smaller and fainter lies below the apex just within the cilia. Inferior wings dark griseous. Body fuscous.

Described from the only British specimen I know, which was taken by Mr. Sircom on a wall near Brislington, August 7th.

Sp. 34. * Distinctella.
G. distinctella, Z.
Lita distinctella, F. v. R. pl. 80, fig. 2.

Expansion of wings, 8 lines.

Head, thorax and antennæ tawny brown; palpi fuscous, the terminal joint black, with the extreme tip white. Anterior wings tawny brown, with three black spots as in terrella, having close to them, in most specimens, some minute white dots; there is a faint fascia near the apex, and just within the latter are a few black spots. Posterior wings dusky, the apices much less prolonged than in terrella; ciliæ rather paler than the wings. Body fuscous.

This species is closely allied to terrella, generally larger than that species and most unlike it in the shape of the apex of the posterior wings.

Taken in July in juniper bushes, on the chalky downs beyond Croydon.

Sp. 35. Vilella. G. vilella, Z.

Expansion of wings, $8\frac{1}{2}$ lines.

Head and thorax griseous; antennæ brown; palpi griseous, terminal joint long, brown beneath. Anterior wings glossy, uniformly griseous, with a luteous tinge, dusted all over with brown atoms. At the base on the costa is a black dot, and another smaller one below it near the inner margin. On the disc before the middle is a pale spot, and beyond the middle a still fainter one but rather larger, a darkish line connecting the two; in the centre of the first spot lies a black dot, and two are seen in the second, very faintly marked and distinguishable only with a lens. Posterior wings silver-grey, ciliæ paler. Body griseous.

Taken by Mr. S. Stevens last May on the coast of the Isle of Wight; found once by a friend of Mr. Stainton at Lewisham, and captured by Mr. Hodgkinson at Northfleet.

Sp. 36. Alacella.
G. alacella, Z.
Lita alacella, F. v. R., D.

Expansion of wings, 7 lines.

Head, palpi, antennæ and thorax blue-black. Anterior wings blue-black, with three elevated black spots on the disc, each faintly circled with white; a comma-shaped whitish spot on the costa, below it on the inferior margin a very small whitish dot, and a few very small whitish dots just within the apical fringe. Inferior wings grey-black. Body fuscous. The underside of all the wings is grey-black; a small light spot showing on the costa, opposite to the large spot on the upperside.

First taken in this country by Mr. Bedell in the autumn, out of an oak at Leatherhead common, and still a rare species with us.

Sp. 37. Peliella.
G. peliella, Z.
Lita peliella, Tis., Tr., D. pl. 297, f. 11.

Expansion of wings, 6 lines.

Head brown, face whitish; palpi, second joint ashy, terminal joint black, white at the tip. Antennæ black-brown, annulated with white, particularly towards the end. Anterior wings black-brown, sprinkled with grey atoms, discernible only with a lens; a black spot near the base, two before the middle and one beyond, these last three having some white scales attached; a yellowish spot on the costa, one opposite on the inner margin, and another at the apex; cilia mixed with grey. Posterior wings dusky. Body fuscous.

This species is very like alacella, but the colour of the wings is brown, not blue-black.

I know only one British specimen taken by Mr. Stainton in the heath-field at Wickham, where there are many fir-trees; and Duponchel, quoting Fischer v. R., says it is found in such places.

Sp. 38. Subocellea.

An. subocellea, St., Wood, 1221.

G. internella, Lien., Z.?

*L. dissonella, F. v. R.?

G. dissonella, Z.?

Recently taken by Mr. J. B. Hodgkinson in the chalk-pits at Northfleet.

Mann's specimen of dissonella is larger than any subocellea I ever saw, and I think darker, nevertheless I believe it to be the same species, but will not say decidedly without knowing more. Judging from the description, the internella of Madame Lienig is possibly the same as our insect, but not having seen it I cannot say positively. These three moths require to be carefully compared.

Sp. 39. * Artemisiella.

G. Artemisiella, Z. Lita Artemisiella, Tis., Tr., F. v. R. pl. 30, f. 2, Dup. pl. 297, f. 8.

Expansion of wings, $5\frac{1}{2}$ lines.

Head grey-brown; palpi greyish, tips black; antennæ black. Anterior wings deep brown, in which, with a lens, are seen red streaks; the inner edge is rusty-yellow, especially towards the base. In the centre, towards the apex, extends a dark streak; a black dot at the extreme apex, and two or three others in the disc, more or less visible. Posterior wings fuscous-grey, shining. Body fuscous.

Taken by Mr. Bedell on Epsom Downs, by myself on Stoat'snest Downs, and by Mr. Logan on Arthur's Seat, Edinburgh, in June and July.

Sp. 40. Instabilella.

An. instabilella, Doug. Zool. p. 1270.

I have attempted to describe this species in the Zoologist, but it is one of those of which no good idea can be conveyed by any diagnosis, so slight and so varying are its characters. It seems to be allied to *Artemisiella*, and has like it a black dot at the apex of the wing, a mark, by the way, which is one least subject to variation in this species.

Since I first took it on the salt-marshes in Essex it has been found at the mouth of the Thames and in Ireland, and seems quite a maritime species.